



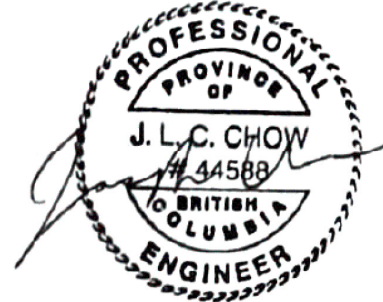
MEMO

DATE: June 23, 2023
 PROJECT NO: 04-23-0185
 PROJECT: Bosa Foods 2335 St Johns St
 SUBJECT: Trip Generation & Parking Requirements

TO: Christian Perizzolo
 South Street Development Group.

PREPARED BY: Joseph Chow, P.Eng.
 REVIEWED BY: Daniel Fung, M.Sc., P.Eng.

Permit No. 1000468



2023-06-23

1. INTRODUCTION

Bunt & Associates Engineering Ltd. (Bunt) was retained by South Street Development Group to provide transportation consulting services for the redevelopment of the project site at 2335 St Johns Street, Port Moody. The site is proposed to be redeveloped into a mixed-use commercial and residential development which includes a Bosa Foods specialty food grocery store.

A Terms of Reference (ToR) is required to be approved by both City of Port Moody (the City) to the commencement of the full transportation analysis or a traffic impact assessment. In the interim, this memorandum provides a high-level summary of the vehicle trip generation and parking requirements and provision based on the City's rezoning parking bylaw requirements.

As the project progresses further, a fulsome transportation impact assessment shall be completed to contemplate all transportation aspects of the development.

2. SITE LAND USE

The site is located at the southwest corner of the intersection of St Johns Street and Queens Street. The land use of the proposed six-level building includes the following:

- 48 residential units (8 studio, 21 one-bedroom, 12 two-bedroom, and 7 three-bedroom units); and
- approximately 9,268 square feet of supermarket (Bosa Foods) space.

3. VEHICLE TRIP GENERATION

Vehicle trip rates were estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. The resulting number of peak hour vehicle trips generated from the proposed site plans are summarized in **Table 3.1** and **Table 3.2** below.

Table 3.1: Peak hour Vehicle Trip Rates

| LAND USE | LAND USE (ITE CODE) | UNITS | AM PEAK HOUR | | | PM PEAK HOUR | | |
|-------------------------|--|------------------|--------------|------|-----------|--------------|------|-----------|
| | | | IN% | OUT% | TRIP RATE | IN% | OUT% | TRIP RATE |
| Residential | Multifamily Housing - Mid Rise (ITE 221) | # Dwelling Units | 23% | 77% | 0.37 | 61% | 39% | 0.39 |
| Commercial (Bosa Foods) | Supermarket (ITE 850) | 1,000 sf GFA | 59% | 41% | 2.86 | 50% | 50% | 8.95 |

Table 3.2: Peak Hour Vehicle Trips Generated

| LAND USE | SIZE | UNITS | AM PEAK HOUR | | | PM PEAK HOUR | | |
|-------------------------|------|----------------|--------------|-----------|-----------|--------------|-----------|------------|
| | | | INBOUND | OUTBOUND | 2-WAY | INBOUND | OUTBOUND | 2-WAY |
| Residential | 48 | Dwelling Units | 4 | 14 | 18 | 12 | 7 | 19 |
| Commercial (Bosa Foods) | 9.27 | 1,000 sf GFA | 16 | 11 | 27 | 41 | 41 | 83 |
| TOTAL | | | 20 | 25 | 45 | 53 | 49 | 102 |

4. PARKING REVIEW

4.1 City of Port Moody Parking Requirements

The following parking review is based on the City of Port Moody's zoning bylaw No. 2937 Section 6 Off Street Parking and Loading Space. **Table 4.1** and **Table 4.2** below presents the parking rates, requirements.

Table 4.1 City Zoning Bylaw Parking Rates

| USE | CITY BYLAW PARKING RATE | UNIT |
|--|-------------------------|---|
| Residential | 1.1 | Per Dwelling Unit |
| Residential Visitor | 0.2 | Per Dwelling Unit |
| Commercial (Retail Food Services) | 1.0 | Per 40 m² of Floor Area |

Table 4.2: City Zoning Bylaw and Proposed Parking Supply

| USE | SIZE | UNITS | STALLS | | |
|--|------------|----------------------|-----------|-----------|------------|
| | | | REQUIRED | PROVIDED | DIFFERENCE |
| Residential | 48 | Dwelling Unit | 53 | 53 | 0 |
| Residential Visitor | 48 | Dwelling Unit | 10 | 4 | -6 |
| Commercial (Retail Food Services) | 861 | m² | 22 | 22 | 0 |
| TOTAL | | | 85 | 79 | -6 |

It is noted the parking layout is separated into two areas (with no vehicle connection from the inside of the building) with separate gated entrances from the street level. One area will be designated for residential and residential visitors (57 stalls) and the other for commercial uses (22 stalls).

Based on the above tables, the developer's current parking provision for the project site is 79 parking stalls while the City's rezoning bylaw parking requirement is in the order of 85 stalls. This is a deficiency of 6 parking stalls. As residential and commercial parking provided adequately meets bylaw requirement and that all 6 parking stalls deficiency is for residential visitors, it is possible to provide shared parking and allow residential visitors to park in the commercial parking area as discussed in the next section.

4.2 Shared Parking Analysis

The required number of residential visitor spots is relatively considerable compared to the overall residential parking required such that these visitors' stalls may be shared with the commercial parking. Given that there is a provision of 4 residential visitor parking spots, further parking is available in the commercial area for overflow especially after store closing hours when residential visitor parking is expected to be the highest.

It is our recommendation to provide shared parking between residential visitors and commercial users in which the residential visitors may park at the commercial parking area. Under our shared parking analysis, we acknowledged that there would be a need of 26 stalls for both residential visitor and commercial users if the parking is shared between the two. This is a reduction of 6 stalls compared to the City's bylaw for residential visitor and commercial parking requirements.

Given the shared parking peak utilization for both residential visitors and commercial users is 26 stalls, the proposed development is providing adequate parking for the expected development parking demand. The shared parking analysis is shown in **Figure 4.1** in the last page and summarized in **Table 4.3** below.

Table 4.3: City Zoning Bylaw and Proposed Parking Supply (with shared parking)

| USE | SIZE | UNITS | STALLS | | | |
|-----------------------------------|------|----------------|----------|--------------------------------|----------|------------|
| | | | REQUIRED | REQUIRED (WITH SHARED PARKING) | PROVIDED | DIFFERENCE |
| Residential | 48 | Dwelling Unit | 53 | 53 | 53 | 0 |
| Residential Visitor | 48 | Dwelling Unit | 10 | 26 | 26 | 0 |
| Commercial (Retail Food Services) | 861 | m ² | 22 | | | |
| TOTAL | | | 85 | 79 | 79 | 0 |

It is also noted that Bosa Foods is specialty grocery store which closes earlier compared to other grocery store chains in Port Moody. The project site Bosa Foods is expected to have a weekday closing time of 6pm (similar to the other two Bosa Foods stores in Metro Vancouver). Therefore, it is expected the parking utilisation profile to be different than standard grocery chains. The commercial parking utilisation would drop off after 6pm which provides more parking availability for residential visitor in which peak utilisation is expected after 6pm.

If residential visitor may park in the commercial area, additional wayfinding/signage will be required as residential visitor will be able to park in both parking areas of the proposed parking plan.

4.3 Proximity to Frequent Transit Network

The project site location is within walking distance (>250 metres) to bus stops on the frequent transit network at:

- EB St Johns St @ Elgin St (Stop ID 53145)
- WB St Johns St @ Elgin St (Stop ID 53186)

For the following bus routes:

- Route 160 (Kootenay Loop – Port Coquitlam) – Peak 15-minute frequency
- Route 180 (Moody Centre – Lougheed Station) – Peak 15-minute frequency

Based on early discussion with the developer, there are plans to potentially include measures to promote transit usage and limit auto dependency for residents and commercial patronage. These measures potentially include providing digital transit information boards in common areas and providing transit passes for commercial store staff members which are to be confirmed in further discussions.

TRANSPORTATION PLANNERS AND ENGINEERS



Figure 4.1 Shared Parking Analysis

| Land Use | Type | TIME OF DAY | | | | | | | | | | | | | | MAXIMUM STALLS | | | | |
|---|--------------------------|-------------|---------|---------|---------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|----------------|---------|---------|----------|----------|
| | | 6:00 AM | 7:00 AM | 8:00 AM | 9:00 AM | 10:00 AM | 11:00 AM | 12:00 PM | 1:00 PM | 2:00 PM | 3:00 PM | 4:00 PM | 5:00 PM | 6:00 PM | 7:00 PM | | 8:00 PM | 9:00 PM | 10:00 PM | 11:00 PM |
| Residential - Visitor | Time-of-Day Factors | 0% | 10% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 40% | 60% | 100% | 100% | 100% | 100% | 80% | 50% |
| | Number of Parking Stalls | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 6 | 10 | 10 | 10 | 10 | 8 | 5 |
| Grocery Visitor | Time-of-Day Factors | 5% | 20% | 30% | 50% | 60% | 67% | 85% | 90% | 85% | 97% | 100% | 100% | 90% | 55% | 0% | 0% | 0% | 0% | 0% |
| | Number of Parking Stalls | 1 | 4 | 6 | 10 | 12 | 14 | 17 | 18 | 15 | 20 | 20 | 20 | 18 | 11 | 0 | 0 | 0 | 0 | 0 |
| Grocery Employees | Time-of-Day Factors | 20% | 30% | 40% | 80% | 90% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 80% | 50% | 0% | 0% | 0% | 0% | 0% |
| | Number of Parking Stalls | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| Total Usage | | 2 | 6 | 9 | 14 | 16 | 18 | 21 | 22 | 21 | 24 | 24 | 26 | 26 | 23 | 10 | 10 | 10 | 8 | 5 |
| TOTAL Parking Provided | | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| Utilization | | 9% | 27% | 41% | 64% | 73% | 82% | 95% | 100% | 100% | 109% | 109% | 118% | 118% | 105% | 45% | 45% | 45% | 36% | 23% |
| Remainder parking | | 20 | 16 | 13 | 8 | 6 | 4 | 1 | 0 | -1 | -2 | -2 | -4 | -4 | -1 | 12 | 12 | 12 | 14 | 17 |
| *Assumed 20% parking reserved for staff | | | | | | | | | | | | | | | | | | | | |
| Shared Parking Stall Reduction: | | -4 | | | | | | | | | | | | | | | | | | |